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As the race for killer robots in contemporary warfare continues, artificial intelligence and the need for an international legal framework are becoming more important.

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Abstract

The term "artificial intelligence" (AI) is now widely used in every facet of human existence. As stated by McCarthy (McCarthy, 2007, page 2), artificial intelligence may be defined as "the science and engineering of making intelligent machines." Over the course of the last ten years, there has been a gradual increase in the use of artificial intelligence, which has, in turn, resulted in our dependence on intelligence data collection gadgets and the invasion of our privacy by the state. "Face recognition tools, autonomous vehicles, search engines, translation tools, and within the context of modern warfare" are all examples of applications that make use of artificial intelligence (Kriebitz, 2020, page 84).

Introduction

There are a number of legal and ethical considerations that have been influenced by the usage of artificial intelligence. The absence of a legal regulatory framework, on the other hand, makes it difficult to address these issues about the use of artificial intelligence, especially in the context of war. According to Article 26 of the International Covenant on Civil and Political Rights, which was ratified in 1966, the only legal framework that exists in regard to artificial intelligence is when it is related to the right to privacy.

With the publication of a number of papers on automated weapons in 2012, the discussion on artificial intelligence began to gather pace. The policy directives issued by the United States Department of Defense (DoD) on the topic of "autonomy in weapons systems" (US Defense Directive, 2012) and a report from Human Rights Watch and the International Human Rights Clinic at Harvard Law School (HRW-IHRC Report, 2012) that advocated for an outright ban on automated weapons were included in these documents. The legal and ethical consequences of the creation and deployment of weapons that are capable of performing activities during conflict autonomously

(without the assistance of humans) are becoming an increasingly important concern for governments and large technology firms. This problem was brought to light in 2017 when the Future Life Institute sent an open letter to the United Nations (UN) that was signed by 126 CEOs and founders of 126 artificial intelligence and robotics businesses. In the letter, they 'implored' nations to avert an arms race for autonomous weapons systems (AWS). Artificial intelligence will continue to have a significant impact on contemporary warfare for many years to come (West et al., 2019, p.145).

In this chapter, we will discuss the use of artificial intelligence technology in Amazon Web Services (AWS), specifically the use of drones during times of war and the potential harm to human rights that the absence of a legal regulatory framework on utilization poses.

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What are automated weapons?

The Amazon Web Services (AWS) and, more specifically, the use of drones in armed conflict circumstances will be the primary topics of study within this chapter. The issue over the use of Amazon Web Services (AWS) has been brought into sharp light as a result of the advancements in artificial intelligence. As a result, in accordance with the academic study that has been conducted on the legal consequences of AWS, the primary emphasis of this chapter will be on the debate of the aspects that constitute an autonomous weapon. Due to the fact that there is no universally accepted definition of an AWS at the international level, this topic is definitely necessary.

On the subject of what makes an AWS, there are several conflicting definitions. Definitions from the United Kingdom Ministry of Defense (MoD) and the United States Department of Defense (DoD) are the ones that are taking the lead in this discussion. In 2011, the Ministry of Defense of the United Kingdom established the following definition of an artificially intelligent system (AWS): "systems capable of understanding higher level intent and direction, specifically of achieving the same level of situational understanding as a human and able to take appropriate action to bring about the desired state." The United Kingdom's position is more in line with the idea that an AI-enabled system may replace a human operator. Once engaged, an autonomous weapon system (AWS) is able to identify and engage targets without additional

involvement from a human operator, according to the United States Department of Defense (DoD), which suggests a different methodology and grounds the name autonomous on this capability. By asserting that "fully autonomous weapons that could select and engage targets without human intervention," the HRW-IHRC study from 2012 utilized terminology that was comparable to the description provided by the United States Department of Defense. On the other hand, the NATO Joint Air Power Competence Center (JAPCC) uses wording that is comparable to the definition of AWS used by the United Kingdom Ministry of Defense. This definition contains terms like "consciousness" and "self-determination." The criteria provided by the NATO Joint Advisory Panel on Proliferation Control and the United Kingdom Ministry of Defense point to a powerful artificial intelligence-enabled weapon system that is intimately tied to human-like intellect. At this time, however, there are no weapons that possess such a high-level of effective artificial intelligence.

The definition provided by the United States Department of Defense and the language used in the HRW-IHRC study are more closely aligned with the AWS that are really in existence. The anti-material defense systems, such as the Israeli Iron Dome and the German MANTIS, as well as the active protection vehicles, such as the Swedish LEDS-150, are examples of these automated weapons (Amoroso, 2017, page 5). The robotic sentinels, such as the South Korean Super aEgis II, which is employed as a surveillance device

along the border between South Korea and North Korea, would also be included in such a definition.

However, the real issue lies in a definition of an Amazon Web Services (AWS) that is future-proof. This definition should include the systems that are currently in place, such as the South Korean Super aEgis, which operates in an environment that is free from conflict, as well as any AWS in the future that will be able to function autonomously without significant human control during times of war. It is necessary for the international community to reach a consensus on a definition that can embrace both the artificial intelligence human cognitive inputting algorithm that the Super aEgis has and the future Amazon Web Services that will have capabilities similar to those of humans.

For the purposes of this chapter, it is assumed that an international legal doctrine that governs the use of Amazon Web Services (AWS) should not be impeded by an agreed-upon international definition of an AWS. In order to find a solution to this issue, the Department of Defense definition should be expanded. The issue of what defines an adversarial warfare system (AWS) will encompass the armament that is accessible right now, and it will also include the more sentient artificial intelligence clever robots that the definition of the United Kingdom Ministry of Defense is anticipating.

The race for killer robots

The United States of America, China,

Russia, and the private technology sector will all have their ties irrevocably altered as a result of the development of artificial intelligence in contemporary warfare. (Roberts et al., 2021, page 59) China has pledged to invest \$150 billion USD in order to become the global leader in artificial intelligence technology. In 2019, Chinese researchers disclosed open-source code for artificial intelligence missile systems. These systems were eventually controlled by deep reinforcement learning algorithms (Harvey, 2020, page 61).

The militarization of artificial intelligence is no longer a science fiction-inspired, far-off dream. There is already an arms race under way between competing nations and private enterprises as a result of the development of artificial intelligence weapons. Not only does the creation and dependence on the use of artificial intelligence in combat have the ability to convert strategic advantage, but it also has the capacity to shift the balance of power, something that occurred during the weapons race that occurred during the time of the Cold War.

Therefore, artificial intelligence is already a reality in the military. The effects of artificial intelligence on military intelligence, surveillance, and security. The judgments that are made by artificial intelligence weapons guiding systems are not influenced by human input and are made autonomously. When it comes to recognizing patterns that are present within datasets, governmental bodies might make use of algorithms. Levine

(2017) has given the impression that even more concerning developments are now being produced. Included in this category are artificial intelligence systems that will enable networked computer agents to make decisions on their own. The fact that autonomous decision making will make it possible for drones to take immediate, reactive measures in the event of a conflict without the need for human intervention is a particularly concerning development. Because of this, a drone response will be predicated on retaliatory violence rather than peaceful discussion.

The United States utilized drones for the first time in the 1990s for the purpose of conducting military surveillance (Chamayou, 2014). Drones have historically been known as remotely piloted craft. As a result of technological advancements and the relatively cheap cost of producing drones, the cost of this technology has decreased to the point where it is now feasible to utilize drones for a wide variety of applications, including filmmaking, monitoring conservation efforts, and delivering medications or food supplies to distant places.

The military's technology for using drones has also progressed in recent years. The technology that was utilized to locate secret key sites held by the Serbian military during the Kosovo conflict in 1999 is the foundation upon which the development of drone technology for the military has been built (Black, 2014). Drones equipped with weapons were first used in the immediate aftermath of the terrorist

attacks that occurred on September 11.

the United States of America (Chamayou, 2014). Analysts at Jane's (2019) believe that over 80,000 surveillance drones and over 2,000 assault drones will be acquired all across the globe over the course of the next ten years. On the other hand, the cost of purchasing weaponized drones and the cost of training humans to operate them are both still rather high. It is certain that this will result in the more economically prosperous nations purchasing drones, which will lead to an increase in the economic imbalance that exists in contemporary conflict. According to Sabbagh (2019), the United Kingdom runs missile-carrying drones and has plans to spend £415 million (€520 million) on Protector drones by the year 2023. In the year 2020, Jane's (2021) predicted that the ten most powerful drone powers had spent eight billion dollars on drone units. According to Sabbagh (2019), "the wide variety of types of unmanned aerial vehicles (UAV) makes them suitable for both surveillance and conflict missions." Furthermore, Sabbagh notes that even low-cost versions are capable of carrying out surveillance operations.

The United States of America, the United Kingdom, and Israel are the primary users of drones in this battle. Both the United States and the United Kingdom have made use of weaponized drones, such as the Predator and the Reaper, which were both manufactured by General Atomics, a firm located in California that has been in business for

more than a decade. Israel is working on the development of its very own drones that are armed. According to Bousquet (2018), Turkey and Pakistan have both undertaken the development of their very own drone manufacturing projects over the course of the last five years. According to Bousquet (2018), Turkey has been using drones on a constant basis since 2016 in order to combat the separatist Kurdish PKK inside its own internal borders, as well as in northern Iraq and Syria. According to Bowman et al. (2021), China is now providing a number of countries with its Wing Loong and CH series drones. These countries include the United Arab Emirates, Egypt, Saudi Arabia, Nigeria, and Iraq. More than 2,400 times during strategic missions were carried out by Reaper drones in Syria over the four years of fighting that lasted from 2014 to 2018, according to figures provided by Drone Wars (2020). This is comparable to two missions per day. (42% of all aircraft operations carried out by the United Kingdom against Isis) and 23% of all weapon-controlled attacks are carried out by drones (Sabbagh, 2019).

According to Chamayou (2014), the notion of drones has shifted from only being "eyes" in the sky to becoming fully realized attacking instruments. This shift occurred as a result of a change in perception. The number of drones that are used by the armed forces of the United States of America was only in the dozens before the beginning of the millennium; however, the current total is in the thousands. According to projections made by the Pentagon, by the year 2035, seventy percent of the United States Air Force will be

comprised of remotely piloted aircraft. The competition for drones is expected to result in the production of at least 8,000 unmanned aerial vehicles (UAVs) and 2,000 attack drones over the course of the next ten years (Sabbagh, 2019).

It is not only the United States of America that agrees that drones are the way of the future for contemporary warfare. There were around forty states that had drone capability in 2005; by 2012, that number had increased to approximately seventy-six states. By the year 2019, it was estimated that more than ninety states had piloting capabilities for drones, and sixty-three states also produced their own drones (Sabbagh, 2019). According to Bergen and Rowland (2014), states as different as Syria and Pakistan, Iran and North Korea, and virtually every NATO member state now have the potential to utilize drones in combat. Countries such as these include Syria, Pakistan, Iran, and North Korea. Additionally, the availability of weaponized drone capabilities is not limited to governments alone. Hezbollah, for instance, has been known to violate Israeli airspace using surveillance drones that were manufactured in Iran (Grossman, 2018). In addition to being able to operate unmanned aerial vehicles (UAVs), Hamas has been able to get the necessary technology from Teheran.

After being retrieved from the ground, Israeli drones that were seized in Gaza may be used for military purposes (Rossiter, 2018). According to Schulte (2019), the Islamic State of Iraq and Syria (ISIS) has proven the use of offensive drones that have been adapted from models that are easily accessible on the civilian market. According to Muhsin (2019), the Houthi Movement has been able to conduct out drone assaults in the Arabian Peninsula in the year

2020 by using both remodeled commercial models and aircraft that were given by Iran. In addition, the Houthi Movement has used drones for long-range operations, which have allowed them to strike targets outside the borders of Yemen. In 2019, drone attacks were carried out on a number of airport facilities in Saudi Arabia (Muhsin, 2019). Furthermore, the massive damage that was suffered in the Saudi Aramco Khurais oil facility at 2019 aroused significant general concern among the world community (Hubbard et al, 2019).

Saudi Arabia is a big investment in military technology and hardware, and it spends about nine percent of its gross domestic product on military expenditures (Hubbard et al, 2019). As a result, the importance of Saudi Arabia as a newer entrance into the drone industry cannot be ignored.

The Stockholm International Peace Research Institute estimated that there were 381 distinct models of automated weapons for military use in 2017. Of those models, about 175 had the capability to employ deadly armament (Boulain et al, 2017). This information was gathered after the institute conducted research in 2017. There are many various kinds of drones, some of which are as little as a backpack and can be carried about like a backpack, while others are bigger than aircraft drones and have the ability to stay in the air for more than twenty-five hours simultaneously. According to the United Nations Institute for Disarmament Research (2017), the next stage in the progression of technology will be the development of intelligent adversarial warfare systems (AWS) that are able to choose targets and decide on their own whether or not to launch an assault.

The development of artificial intelligence has also had an effect on the behavior of states during times of war (Krahenmann, 2020). Because of artificial intelligence, there has been a rise in the employment of armed drones in military operations, primarily by the United States in Afghanistan (Sharkey, 2015). The proliferation of so-called "killer robots" in the field of artificial intelligence has given rise to ethical and legal concerns (Docherty, 2012). The use of automated drones in conflict comes with the danger that a drone may not be able to differentiate between civilians and fighters, according to Kallenborn (2020), who also makes the point that this risk is

associated with the use of civilian drones.

The ethical concerns of the use of automated weaponry

There is a great deal of artificial intelligence (AI) technology that is still in the process of being developed, which has led to doubt on whether or not AI military advantage would dominate conflicts in the future. Despite the fact that unmanned aircraft are capable of operating on their own, they are not yet at the point where they can successfully complete challenging tasks in the same manner that people can. It is suggested by Simon (2018) that artificial intelligence performs well when it is used in a certain and planned set of conditions. However, it is possible that we are on the verge of artificial intelligence automated computers being able to acquire cognitive recognition in order to solve issues and make judgments that are even more similar to those made by people.

One of the ethical concerns that arises is the possibility of conflict being resolved without or with little human involvement or meaningful human control. The environment of conflict and the laws that control it will need to be redesigned in order to accommodate the new normal of conflict and war, which may be a post-human one (Mangiameli, 2012). The concept of a more ruthless and nihilistic Amazon Web Services (AWS) that will have less input from human operators will serve as the theoretical foundation for this reconfiguration. The instinct of a machine that is incapable of making moral or ethical judgments, in

conjunction with the ambiguity of triumph, will serve as the foundation upon which power is established inside a conflict scenario. It is just not conceivable to forecast how the law would be able to keep up with or even block such technological advancements. According to Chamayou (2015), the paradigm of conflict is no longer to monitor and punish, but rather to monitor and eradicate.

employing the concept of war by Gentilis (1598) as two fighting parties as duelists, previously equal, with the same duties and similar aims, Chamayou (2015) has articulated conflict by employing this concept. According to Chamayou (2015), the introduction of drones into armed conflict is significantly altering and shaping this basic representation of war, which is now undergoing a transformation. It is the basic foundation of international law that war and conflict are founded on some kind of simultaneous use of power and force. This is the essence of international law. Grotius (1625) made the observation that the restriction of the use of poison and assassination was intended to protect the necessity to maintain the equilibrium of dualism during times of conflict. This meant that every actor or fighter would have the same tools available to them in the face of their adversary who was attempting to harm them. If one aggressor state has the capability of a more sophisticated automated drone weapons than another, then these parallel agendas and the balance of dualism within the battle will be progressively destroyed, if they have not already been lost.

There is also the discussion over the ethical justification of war, as well as the arguments concerning *jus ad bellum* and *jus in bello* in respect to the autonomy of weapons (Amoroso, 2017). Concerning the beginning of hostilities is the primary concern at hand in this situation. By its own nature, an artificial intelligence-controlled weapon that is programmed to make rapid judgments in a split second may, by its very nature, launch hostilities more quickly or even escalate conflict farther without the built-in human reaction of thought and compromise. This very speed of judgment from AI decision making poses a danger to the foundations of *jus ad bellum* and *jus in bello*, as well as the capacity of humans to govern strategic or tactical advantage.

Payne (2018) contends that ambiguity and inaccuracy are unavoidable, and he asks how an automated computer would make tough philosophical and ethical judgments that deal with the worth of life in and of itself. From which ultimate point of view would this viewpoint be derived? Which of the following would be most likely to provide this viewpoint: the commander in chief, the *de facto* head of the state, or some kind of worldwide norm of use? Ethical concerns about the worth of life that are made at a moment are dependent on a human value system, and this ethical concern may often be retroactively awakened in order to defend a judgment. This kind of idea

would not be able to be effectively included into an algorithm that would be utilized in an automated weapon since it would be impossible to properly predict every possible result that may occur

during a fight.

The most important ethical worry is the situation in which conflict is being driven by algorithms and robots without any involvement from humans. Does this problem have a solution? When it comes to battle, ethical questions have always been difficult to resolve. On the other hand, drones and the ways in which they are used do provide some new ethical and, as a result, legal challenges. It is not the case that their use substantially undermines the international legal norm that is embedded in conflict. The use of drones, on the other hand, represents the natural growth of armament in conflict, which has witnessed a movement from hand-to-hand fighting to nuclear weapons to intercontinental ballistic missiles (ICBM) over the course of the last one hundred years.

On the other hand, there are presumptions that there is a moral and ethical distance between the person operating the drone and the individuals being targeted. However, it is evident that the operation of drones is still, however, logistically managed by a member of the military or intelligence agency of a state. Finn (2011) has made the correct observation that completely autonomous drones will carry with them ethical and legal difficulties associated with their use. The use of drones is still the responsibility of the command, and the operations of these drones must comply to accountability procedures in the same manner that other war missions are responsible. According to Aston (2010), who made this assertion ten years ago, the so-called "PlayStation mentality" of targeted assassinations is

not supported by evidence. On the other hand, according to the findings of the research conducted by O'Connell (2010), there was evidence to imply that a drone operator was far more likely to dehumanize their targets.

The international legal accountability, responsibility, and the usage of drones

Compliance with International Humanitarian Law (IHL) is the focal point of any conversation about Amazon Web Services (AWS) and artificial intelligence-enabled drones. The area of concern under international humanitarian law is the manner in which the use of drones aligns with the fundamental principles of both the laws of war and international humanitarian law, including the concepts of distinction and proportionality within the context of conflict. According to the suggestion made by Van den Boogaard (2015), an automated weapon need to respect the same standards of distinction at least as well as a human soldier who is both skilled and conscientious.

An autonomous drone would need to have advanced cognitive capacities in order to be able to comply with international humanitarian law (IHL). However, in reality, the differentiation between a combatant and a non-combatant is not readily obtained. At this point in time, capacities of this kind are an extremely distant prospect in the future. Within the framework of international humanitarian law, there is a basic issue that an autonomous drone would never be able to operate in accordance with the principles of

difference. According to Sparrow (2015), the identification of this international humanitarian law concept that is embedded inside the behavior of an automated weapon would provide difficult obstacles that are not insurmountable for the programmers and engineers working on Amazon Web Services.

Additionally, there is the issue of proportionality, which Solis (2016, page 293) has referred to as the "terrible and impossible problem of proportionality." The intricate nature of the concept of proportionality, which involves finding a balance between the benefits that a certain action might provide to the military and the potential damage that the action can do to civilians (or other groups). When autonomous drones are used, there is always the possibility that people who are not participating in the fight may be injured or killed. This is an unexpected consequence that will always occur. If, on the other hand, this duty for the civilian is an unintended result of using weapons that are infused with artificial intelligence, then a state is obligated to make every effort to reduce the likelihood of a civilian being killed or injured. As a result, it is both legally and ethically necessary for a state to take precautions against the possibility of inadvertent injury while employing drones. It is suggested by Byman (2013) that the use of drones has to be intertwined with the ethical responsibility that comes with the requirement to adhere to proportionality. Furthermore, it is suggested that it may not be sufficient for the state to foresee unintentional civilian injury but also to proactively minimize it. It is not

possible to pre-program this concept into an artificial intelligence algorithm before a battle has already begun. This is because such a principle is connected to a particular scenario and the balance of the actions that are to be made by the commanders who are engaged in the planning and execution of an assault. In light of this, components such as the "reasonable military commander," which Sharkey (2012, page 787) proposes, are just an algorithm that cannot be coded.

The protection of human rights in the context of the deployment of drones during combat, as well as the more general regulations that are included in the laws of war, are multifaceted and difficult to understand. The International Humanitarian Law (IHL) is founded on land conflict as well as the control and ownership of territory. These essential principles may be found within the laws of the Geneva Convention 1949 and the Hague Convention 1907, as well as the supplemental protocols that accompany each of these conventions. A variety of laws that regulate military combat inside state occupation are outlined in both of these treaties. Additionally, both conventions impose restrictions on the occupants of the territorial area that has been taken. The challenge is in attempting to modify these regulations regarding occupation and area so that they are compatible with the use of drones. Instead of focusing on ground, the primary objective of the use of drones is to fight for control of the sky. It was said by Chamayou (2015) that the mere comprehension of the terrain that is being occupied is redundant and worthless, and that the deployment of

drones during wartime is primarily focused on who controls the sky above.

According to the assertions made in this chapter, in order to maintain control over AWS, there must be a stringent international legal regulatory framework for compliance of use, or there must be a prohibition on weapons that do not have any meaningful human control or involvement.

At the moment, there is just one international convention that is centered on the purchase and control of drones that are used in armed conflicts. In 2016, forty-five governments came together to produce a Joint Declaration for the Export and Subsequent Use of Unmanned Aerial Vehicles (UAVs) that were either armed or equipped with strike capabilities. The emphasis of the statement was on the use of drones in the context of the rising employment of unmanned weapons during times of war, with the intention of protecting human rights using both ethical and legal standards. Questions pertaining to the legality of use and responsibility within the framework of international humanitarian law and international human rights law are included in the declaration.

This Joint Declaration was established with the intention of serving as a foundation for a unified approach by the international community to the use of armed drones. The agreement includes the following primary principles: "the applicability of international law, including both the law of armed conflict

and international human rights law, as applicable, to the use of armed or strike enabled UAVs," and "in light of the rapid development of UAV technology and the benefit of setting international standards for the export and subsequent use of such systems, we (the signatory states) are resolved to continue discussions on how these capabilities are transferred and used responsibly by all states." Both of these principles are included in the agreement.

Regarding the Joint Declaration, however, there have been some criticisms presented. Criticism has concentrated on the United States of America taking the initiative to establish the agenda for the Joint Declaration. With respect to the employment of drones during times of war, the United States of America is a state that practices the use of drones, and the purchase of drones has been seen as the most significant issue by the international community. According to Stohl (2018), the United States is increasing its use of drones in combat situations, which is considered to be a "responsible" use of drones. Stohl (2018) further claims that the United States is increasing the pace at which drone strikes are carried out, broadening the geographic scope of where strikes may take place, and transferring decision-making power away from the President and placed it in the hands of military commanders.

The wording of the Joint Declaration has been criticized for being ambiguous in and of itself. The usage of the word "responsible use" without providing an explanation of what it means to use it

responsibly is the source of the ambiguity. The United Nations Institute for Disarmament Research (2017) brought attention to the problematic nature of the notion of responsible usage and proposed that the phrase required a more succinct definition. Within the Joint Declaration or the larger international community, however, there is no consensus over the manner in which the concept of responsible usage should be understood. since of this, the efficacy of a declaration that relates to the establishment of regulations on the control and utilization of an armed drone is hindered since there is no clear description of how to utilize an armed drone in a responsible manner.

A state that signs the Joint statement may be under the assumption that it may credibly claim to have adhered to an international standard for the use of drones if it commits to the principles included within the statement, such as the need that armed drones be deployed in a responsible manner. The 'responsible use' concept that is included in the statement is worthless since it does not provide any precise information on what might be considered responsible usage. Due to the fact that the statement does not include any concise definitions about use and responsibility, it is thus little more than a justification for the use of drones, rather than a set of rules that have been agreed upon by the international community to regulate how drones are used. There has been a request made to the states to sign on to the declaration; however, it does not seem that there is a great deal of hurry to do so.

It is the contention of this chapter that a definition of responsible usage need to be specifically limited. A more expansive definition would require nations to make use of the more expansive or confusing component of a

definition in a manner substantially comparable to the manner in which governments define the concept of self-defense. A restricted definition that is in accordance with the United Nations Charter and the principles of *jus bello* is required. If there is a clear criteria about how and when drones may be deployed, then this would make it possible to find a solution to the problem of how drones are utilized.

On the other hand, it seems that there is very little international redress available at this period in time to penalize or regulate activities regarding the use or abuse of drones during times of wartime. According to Birdsall (2018), the United States administration has reportedly made it a goal to muddy the waters between the declaration of war or conflict and the implementation of international regulations. In order to do this, the United States of America uses the argument that the deployment of drones during a battle that involves terrorism ought to be seen as a domestic matter and, as a result, falls beyond the typical boundaries of international law. This blurring of the distinctions might be exploited by any state to legitimize the deployment of drones in an aggressive way and to tie their use to a domestic problem at the same time. Despite the fact that the violation of international legal standards or the normative impact of the rules of war are obvious, the state is able to provide its

own justification for the use of drones and combat because of the blurring of the narrative between the justification of war (particularly on terrorist grounds) and the use of drones. Consequently, there is a need for international law to establish a clear paradigm that specifies when it is acceptable to kill using drones and when it is not acceptable to do so.

Within the context of the United Nations Convention on Conventional Weapons (CCW), there is a more broad international debate about AWS, which includes drones. This topic has fallen under the umbrella of the international legal system. The Group of Governmental Experts (GGE) was given an open-ended mission to establish an operational and regulatory framework for the use of emerging technologies in the field of lethal autonomous weapons (LAWS) during the informal conference of the High Contracting Parties that took place in 2013. In 2019, the GGE on LAWS made a proposal that the High Contracting Parties to the CCW adopt 11 guiding principles. This suggestion was the culmination of these sessions, which took place in 2019. The following are the guiding principles:

(a) The international humanitarian law continues to be applicable in its entirety to all types of weapons systems, including the possibility of the development and deployment of deadly autonomous weapons systems.

(b) Because accountability cannot be delegated to computers, it is imperative that human beings continue to bear the responsibility for making choices about

the use of weapons systems. It is important to take this into consideration throughout the entirety of the weapons system's life cycle.

(c) Human-machine interaction, which can take many different forms and be implemented at different stages of the life cycle of a weapon, should be used to ensure that the potential use of weapons systems based on emerging technologies in lethal autonomous weapons systems is in accordance with applicable international law, in particular international humanitarian law (IHL). When establishing the level of human-machine contact and the breadth of such engagement, a variety of criteria should be taken into consideration including

this includes the operational environment, as well as the features and capabilities of the weapons system as a whole.

(d) Accountability pertaining to the development, deployment, and use of any new weapons system within the scope of the CCW shall be assured in conformity with the relevant international law. This includes the operation of such systems within a responsible chain of human command and control.

(e) In accordance with the duties that states have under international law, it is necessary to determine whether the use of a new weapon, means, or technique of combat would be forbidden by international law in some or all situations before the research, development, acquisition, or adoption of

the weapon, means, or method.

(f) When developing or acquiring new weapons systems based on emerging technologies in the field of lethal autonomous weapons systems, it is important to take into consideration the risk of acquisition by terrorist groups as well as the risk of proliferation. Physical security and appropriate non-physical safeguards (including cyber-security against hacking or data spoofing) are also important considerations.

(g) The design, development, testing, and deployment cycle of developing technologies in any weapons system should include risk assessments and mitigation mechanisms. This is because weapons systems are always evolving.

(h) When it comes to maintaining conformity with international humanitarian law and other relevant international legal duties, it is important to take into consideration the use of developing technology in the field of deadly autonomous weapons systems.

In the process of formulating prospective policy measures, it is important to avoid anthropomorphizing developing technology in the field of deadly autonomous weapons systems.

The discussions that take place within the framework of the CCW, as well as any prospective policy measures that are implemented, should not impede the development of intelligent autonomous technologies or access to peaceful applications of these technologies.

k) The Convention on the Control of Weapons of Mass Destruction (CCW) provides an appropriate framework for dealing with the issue of emerging technologies in the field of lethal autonomous weapons systems within the context of the objectives and purposes of the Convention, which seeks to strike a balance between the necessity of military operations and the concerns of humanitarian organizations.

During the subsequent meeting of the GGE, which took place in August 2021, the GGE expressed four themes for discussion. These areas were the application of international humanitarian law (IHL), human responsibility, human and machine interaction, and weapons reviews. On the occasion of the Sixth Review Conference on Certain, the topics that will be discussed will be provided with a report on LAWS.

In December of 2021, the Conventional Weapons (CCW) conference will take place. The advocates of the limitation, use, or prohibition of Amazon Web Services (AWS) are hoping that this will be legally implemented inside an update of the CCW that has been agreed upon.

Neither are the eleven guiding principles that were agreed by the GGE a legally enforceable normative framework of AWS; rather, they are only a reemphasis of the principles of international humanitarian law (IHL), and they do not include anything that is significantly novel in terms of the protection or regulation of the use of autonomous weapons. The principles, on the other hand, may be used to educate debates and demonstrate that the majority of CCW state parties are in agreement about the need of a legally binding instrument to

address the ethical, legal, and technological issues that have been raised by AWS. During the Sixth Review Conference of the CCW, the state parties should at the very least reach an agreement on a mandate to develop and promptly approve a new legally binding instrument on Amazon Web Services (AWS). This will ensure that a new treaty is brought into existence. Should the Review Conference fail to provide its approval to such a legally enforceable mandate, then an internationally legally binding document must be discovered in a venue that is not affiliated with the CCW. Additionally, there must be a quick agreement to outlaw AWS that choose and engage targets in combat without meaningful human oversight.

Conclusions

Amazon Web Services (AWS) and artificial intelligence (AI) enabled drones are becoming more prevalent in contemporary warfare. The use of drones with Amazon Web Services (AWS) brings up issues that are not only ethical but also legal. It is possible to make the case that the legislation regarding the use of drones and the accountability that comes along with them is not keeping up with the advancements in technology. At the same time as they have the potential to deliver more deadly immediate power to a conflict scenario, drones have the impact of dehumanizing combat. Because of the physical distance that separates the operator from the drone, there is a possibility that the operator and the combatant will not be able to make ethical decisions. This issue becomes considerably more widespread when an Amazon Web Services (AWS) is able to make judgments based on its artificial intelligence programming without requiring direct input from humans in the decision-making process.

These issues and worries are only going to become worse as technical advancements begin to make it possible for Amazon Web Services to make decisions that are cognitively similar to those made by humans.

The use of drones and drone attacks often violate the rules of international humanitarian law (IHL). When an artificial intelligence drone that is being used as a weapon commits an undesirable deviant activity, there is an additional level of legal complexity involved in dealing with accountability concerns. To hold an autonomous object accountable for their acts via the use of legal penalties is not something that can be done by the international community or the state. In the event that the drone has behaved in an independent way, it would seem to be almost hard to hold a programr accountable for the algorithm (unless the behavior involves gross negligence). It would also be difficult to discover high-ranking authorities who would be accountable for the activities of autonomous drones since it would be difficult, if not impossible, to anticipate all of the unanticipated behaviors that may occur.

In the discussion that surrounds "killer robots" and Amazon Web Services (AWS), there is a good use of drones, which does signal that a more trustworthy artificial intelligence is being lost. According to Whetham (2015), drones have the potential to play a significant role in complicated humanitarian catastrophes because of their ability to conduct surveillance in distant areas. Kennedy and Rodgers (2015) propose that drones might potentially be of assistance to the United

Nations and the international community by removing the need for peacekeepers in regions that are experiencing tough conflict.

However, before the enlightened and trustworthy use of artificial intelligence drones can be completely adopted, international law has to catch up with the advancements in AI technology and control the use of drones in all scenarios, including those that involve war and those that do not involve conflict, as well as the responsibility of employing drones as killing machines. As of right moment, there needs to be a unified and legally enforceable international framework on the use of drones (and AWS), as well as a framework that stipulates that any drones that are endowed with artificial intelligence must have meaningful human control.

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